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C-b SHALE OIL VENTURE

SOCIO-ECONOMIC MONITORING REPORT

NUMBER THREE
(ANNUAL REPORT)

February, 1979

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INTRODUCTION

This is the third monitoring report, issued by the C-b shale oil project. This report contains selected information on the C-b project workforce and socio-economic conditions within nearby communities. The workforce data presented in this report reflects current conditions, as of February, 1979. The community data is tabulated for the year, 1978, whenever possible and is analyzed in comparison with data from previous years.

The workforce data was collected through a questionnaire completed by persons employed at the C-b site. Completed surveys are available from 66 percent of the current workforce, therefore the statistics presented in this portion of the report are estimates rather than actual numbers.

The community data was collected from various sources in the communities of Rifle and Meeker; and from Garfield and Rio Blanco counties.

I. THE C-b WORKFORCE

The on-site workforce included a total of 253 persons as of February, 1979. This is a decrease of 29 workers since the last monitoring report was released in November, 1978. The activity lag between the completion of the head frame construction and resumption of shaft sinking accounts for the temporary decrease in the workforce. The workforce is anticipated to rise through 1979 to the level indicated in Figure A, as shaft sinking activity increases.

About 90 percent of the workers still hold construction or temporary jobs at the site, while 10 percent of the workers are considered permanent. Figure A shows the actual workforce as it compares to the projected workforce.

A. Housing

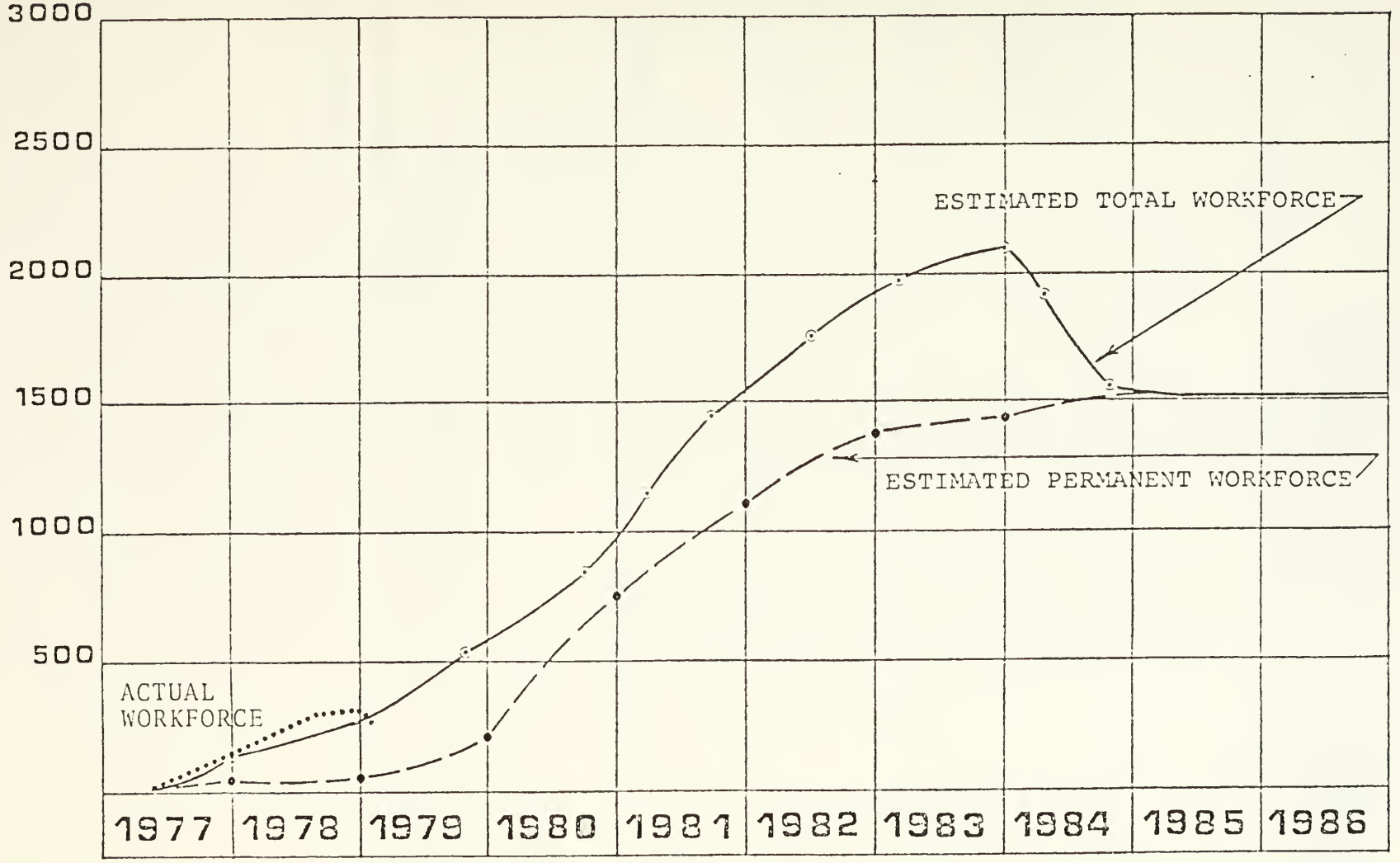
1. Location

The majority (56%) of the workers surveyed reside in Rifle. This percentage has remained relatively constant since July,1978. Table I shows the place of residence of all workers surveyed as of February, 1979 and compares those figures with the figures released in July, 1978.

2. Length of Residence

Approximately 60 percent of the workers surveyed have lived in their present homes less than a year, while 40 percent have resided at their present location for over one year. Seventy-two percent of the workers living in Rifle are newcomers to that community, while 58 percent of the workers living in Meeker have resided there less than one year. These figures seem to reflect the tendency for workers,who have recently

C-b Shale Oil Venture



OCCIDENTAL OIL SHALE PROCESS PROJECT MANPOWER ESTIMATE

FIGURE A

TABLE I

PLACE OF RESIDENCE

Community	Percentage of Workers Surveyed, Residing There February, 1979 (N = 168)	Percent of Workers Surveyed, Residing There July, 1978 (N = 296)
Rifle	56	55
Meeker	8	7
Silt	8	10
Grand Junction Area	7	6
Glenwood Springs	4	4
New Castle	3	5
Grand Valley	1	3
Rangely	0	1
Other West Slope	2	5
Piceance Creek	0	2
Denver Area	-	1
Outside Colorado	4	1
Unknown	7	-
TOTAL	100	100

relocated to the project area, to establish residence in either Rifle or Meeker. Table II shows the percentage of employees in each community according to the length of their residence.

TABLE II

LENGTH OF RESIDENCE

Community	Percent of C-b Workforce Residing There More than One Year	Percent of C-b Workforce Residing There less Than One Year	
Rifle	28	72	100%
Meeker	42	58	100%
Silt	77	23	100%
Grand Junction Area	73	27	100%
Glenwood Springs	57	43	100%
All Other Communities	43	57	100%
Total Workforce	40	60	100%

3. Type

Table III lists by community the percentages of the workforce living in various types of housing. Approximately the same percentage of the total workforce own their own house, rent houses and/or rent apartments. Of the employees residing in Rifle, 50 percent live in a home which they own, while 23 percent of employees living in Meeker own homes.

TABLE III

TYPE OF RESIDENCE OF WORK FORCE

Community	Own House	Rent House	Own Mobile Home	Rent Mobile Home	Apartment	RV	Motel	
Rifle	34	12	16	7	24	4	3	100%
Meeker	23	46		8	23	-	-	100%
Silt	13	47	16	7	6	-	-	100%
Total Workforce	25	23	16	5	22	3	6	100%

4. Preference

When asked to state what type of residence they preferred to be living in, the majority of workers indicated single family housing. Table IV shows the preferences in detail.

TABLE IV

HOUSING PREFERENCES OF THE TOTAL WORKFORCE

Preferred Type	Percent Responding
Single Family House	76
Mobile Home	13
Apartment	11

5. Cost

Response to the survey showed the median cost of housing per month to be $248 for home owners, $200 for home renters, $200 for mobile home owners, $155 for mobile home renters, and $225 for apartment renters. (See Table V). However, these figures are lower than the data on current housing and rental costs in the local communities presented in the Housing and Land Use Section of this report. The median monthly cost of housing to the workforce is low, since it

includes cost for long term residents, who gnerally pay less for housing and single status workers, who live together and share costs. The low and high figure in Table V reflects the large range in monthly cost of housing to the C-b workforce.

TABLE V

MONTHLY COST OF HOUSING TO THE C-b WORKFORCE

Type	Median	Low Figure	High Figure
Own House	$248	$ 50	$700
Rent House	$200	$ 60	$450
Own Mobile Home	$200	$ 60	$440
Rent Mobile Home	$155	$ 50	$300
Apartment	$225	$100	$350

B. Age, Marital Status and Family Size

1. Age

The median age of current employees is 31 years. This is three years older than that recorded in the last report.

2. Marital Status

About 70 percent of the workers surveyed are married, but only 46 percent are living with their families full-time. Table VI shows the percentage of workers, by community; who are married and reside with their families; who are married but do not reside with their families full-time; and who are single.

3. Family Size

Average family size for all married members of the workforce is 3.5 persons, or two adults and 1.5 children per family. An estimated 60 C-b worker families

TABLE VI

MARITAL STATUS OF WORKFORCE

Community	Percent Married and Living With Family	Percent Married But Not Living With Family Full-time	Percent Single	
Rifle	49	26	25	100%
Meeker	58	17	25	100%
Silt	61	8	31	100%
Grand Junction Area	36	9	55	100%
Glenwood Springs	43	14	43	100%
All Others	31	34	35	100%
Total Workforce	46	24	30	100%

have relocated to communities close to the project within the past year. These families have contributed approximately 100 children to the area, of which an estimated 55 are school-age children (ages 5-18).

In Rifle, an estimated 42 families of C-b workers are new to the community, and they have contributed approximately 70 children of which about 40 are school age.

About 30 of the present C-b workers who have families, but who do not have their families in the local area, are planning to have their families join them in the near future. Most of these new families are planning to settle in Rifle and would contribute an estimated 25 new school children to that community.

C. Recreational Activities

The most popular recreation activities among the C-b workerforce are fishing, hunting and skiing. Fishing, hunting and swimming appear to be the most popular activities among family members of C-b workers.

Table VII lists the percentages of the workers and the percentages of worker family members who participate in various recreational activities.

TABLE VII

RECREATIONAL ACTIVITIES

Activity	Percentage of the Workforce Participating*	Percentage of Worker Family Members Participating*
Fishing	30	26
Hunting	29	19
Skiing	19	9
Camping	10	7
Basketball	7	1
Swimming	6	11
Tennis	6	5
Bowling	4	
Golf	3	
Horseback Riding	3	1
Four-Wheeling	3	
Softball/baseball	2	
Motorcycling	2	1
Waterskiing	2	

* Does not total 100 percent due to multiple responses.

Other responses include: dancing, football, photography, macrame, flying, tubing, trapping, horseshoes, running, movies, gardening.

II. THE COMMUNITIES

A. Housing and Land Use

1. Rifle

The community of Rifle continues to show the most growth in housing and subdivision development. According to the Rifle Building Department, 257 building permits were issued in 1978. This number is more than double the number of permits issued in 1977. In Rifle there were seventy new homes built in 1978; four town houses, thirteen four-plexes including the senior citizen housing project, twelve duplexes, and six new commerical buildings. The valuation of the new construction was $5,556,668 in 1978, while in 1977 the valuation was $2,606,000. In 1978 a total of sixty-one mobile home permits were also issued in Rifle.

During the fourth quarter in 1978 the average sales price of a new single family home in Rifle was $55,241. This is 19 percent higher than the average price of a home during the fourth quarter in 1977 (see Table VIII.) The average sales price for existing housing during the fourth quarter 1978 was $60,872, forty-four percent higher than in 1977. The average residential lot price, in the fourth quarter, increased 70 percent in 1978 from $9,921 in 1977 to $16,878 in 1978.

Cost of rental housing has also increased in Rifle. Although there were no houses available for rent in the fourth quarter of 1978, the first monitoring report, released in July, showed that the average rent for single family housing was $200. The most dramatic increase in rents were for apartments. The average rental price for an apartment rented during the fourth quarter 1978 was $355, a 140 percent increase over the average rental of $148 in 1977.

TABLE VIII

AVERAGE HOUSING AND RENTAL COSTS
IN RIFLE FOR FOURTH QUARTER
1976-1978

	Oct-Dec 1976	Oct-Dec 1977	Oct-Dec 1978	Percent Increase 1977-1978
Average sales price for new houses	$41,937	$46,392	$55,392	19%
Average sales price for existing houses	$39,411	$42,228	$60,872	44%
Average resident lot price	$ 6,840	$ 9,921	$16,878	70%
Average advertised monthly rental for houses	$ 148	$ 188	None Available	
Average advertised monthly rental for apartments	$ 139	$ 148	$ 355	140%

Source: Lynn Behrns, former Rifle Planner
Leo Swartzendruber, Rifle Realty

2. Meeker

Meeker also continues to grow, although it shows less growth than Rifle. According to county warranty deeds, which give information on housing sales and prices, the average sales price of a home in Meeker increased from $46,237 in the first half of 1978 to $48,083 in the second half. The greatest number of homes sold were in the $50,000 to $54,999 range. The total number of houses sold in Meeker is estimated to be 60 homes in 1978 (see Table IX.)

A telephone survey in January, 1979 of three major rental property owners in Meeker, indicated only one house and four apartments advertised for rent. Recently constructed apartments in Meeker rented between $275 and $350 per month in July, but in January 1979 were renting between $355 to $400. Depending

on the renter, the owner of the property, and the type of rental property, rents may vary in Meeker anywhere from $150 to $400 per month.

TABLE IX

HOUSING SALES AND PRICE RANGES IN MEEKER
1978

	January-June	July-December	Total
Sales	30	18	48
Price Volume	$1,387,100	$ 865,500	$2,252,600
Avarage Price	$ 46,237	$ 48,083	$ 46,929
Sales by Price Range			
$25-29,999	3	0	3
30-34,999	5	0	5
35-39,999	3	4	7
40-44,999	3	2	5
45-49,999	5	2	7
50-54,999	5	5	10
55-59,999	3	3	6
60-64,999	0	2	2
65-69,999	0	0	0
70-74,999	2	0	2
75-79,999	0	0	-
80,000 +	1	0	1

Source: Survey of Warranty Deeds, Clerk's office, Rio Blanco County and Credit Bureau Bulletin, Craig Credit Collection Service and QDA, A Housing Market Feasibility Analysis, 1979, Rio Blanco County.

Those housing sales where there was no land transaction (new construction on previously purchased subdivision lot) are not accounted for in Warranty Deeds. It is estimated that this later group of sales is approximately 20% of all sales in Meeker. Therefore, total sales in Meeker is estimated to be 58 homes.

B. Law Enforcement

1. Rifle

Growth has affected the number of crimes reported to the police in both Rifle and Meeker. The total number of crimes reported increased 86 percent from 1977 to 1978 in Rifle. Increases in criminal activity in Rifle were primarily in the categories of theft, drugs, disorderly conduct, criminal trespass, criminal mischief, child abuse and neglect, runaway and curfew violations. Traffic accidents increased 71 percent (see Table X.).

TABLE X

RIFLE LAW ENFORCEMENT DATA 1976-1978

Selected Crimes Reported [1]	1976	1977	1978	1977-78 Percent Increase
Theft	85	119	182	53
Narcotics/Drugs	7	5	15	200
DUI/DWI [2]	32	27	74	174
Disorderly Conduct	18	15	70	366
Criminal Trespass	11	17	26	53
Criminal Mischief	37	28	48	71
Family Disturbance	3	6	2	(- 66)
Child Abuse/Neglect		7	9	29
Runaways	16	9	18	100
Curfew Violation	9	8	14	75
Total Reports	395	371	690	86
Total Arrests	162	164	399	143
Total Juvenile Cases	95	95	160	68
Total Traffic Accidents		123	210	71

1. All crimes reported are not included in this report
2. Driving under the influence, driving while intoxicated.

Source: Rifle Police Department

2. Meeker

Crimes reported in Meeker increased 84 percent from 1977 to 1978. In Meeker, increases in crimes reported were primarily in the categories of assault, burglary, theft, sex offenses, disorderly conduct and fraud (see Table XI.).

TABLE XI

MEEKER LAW ENFORCEMENT DATA 1976-1978

Selected Crimes Reported [1]	1976	1977	1978	Percent Increase 1977-1978
Assault	6	8	11	38
Burglary	14	7	13	86
Theft	50	42	84	100
Sex Offenses	1	3	6	100
Narcotics	5	10	5	-50
Driving Under the Influence	13	24	24	0
Disorderly Conduct	6	8	25	88
Fraud	0	3	7	133
Runaway	7	11	11	0
Total Reports	123	174	320	84

1. All crimes reported are not included in this report

Source: Meeker Police Department

C. Schools

1. Rifle

Enrollment in Garfield School District RE-2 has decreased slightly according to figures representing Fall enrollment 1978 through February enrollment 1979. Dariel Clarke, the district superintendent, felt the decrease was temporary due to a decrease of construction workers during the winter months. Yet,

current enrollment still shows an increase over the enrollment at the close of the Spring Term 1978. The RE-2 School District currently has the full time equivalent (FTE) of 94 certificated staff and 64 support staff employed. The assessed valuation of the school district increased 12 percent from 1977 to 1978, while the mill levy decreased (see Table XII.)

TABLE XII

GARFIELD SCHOOL DISTRICT RE-2 DATA

Enrollment	Spring 1977	Sept 1978	Oct. 1978	Nov. 1978	Dec. 1978	Jan. 1979	Feb. 1979
Elementary	887	922	913	938	932	922	917
Secondary	993	814	819	819	816	802	804
Total	1622	1740	1732	1732	1748	1724	1721
	1977		1978			1979	
Staff							
Certificated (FTE)						94	
Support Staff (Number employed)						64	
Assessed Valuation	$18,554,630		$18,851,520			$21,167,920	
Mill Levy	56.14		56.13			49.81	

Source: Garfield School District RE-2 Superintendent

2. Meeker

The Meeker School District also showed a slight decrease in enrollment from Fall 1978 to January 1979. The school superintendent's office explained the decrease is due to workers who left the community upon completion of the Irbe construction project. Currently there are 46.35 (FTE) certified staff and 29 support staff. The assessed valuation has increased as well as the mill levy (see Table XIII) from 1978 to 1979.

TABLE XIII

MEEKER SCHOOL DISTRICT RE-1

Enrollment	Capacity	Spring 1978	Fall 1978	January 1979
Rock School (Grades 1-8)	40		21	27
Grades 1-4	350	352 (Total elementary)	276	257
Grades 5-6	150		126	124
Grades 7-8	250	113	118	106
Senior High	450	227	248	240
Total	1240	692	768	754
Staff				
Certified (FTE)				
Support (Number employed)				
Assessed Valuation		23,686,620	23,291,360	23,358,870
Mill Levy		40.67	43.67	48.05

Source: Meeker School District RE-1 Superintendent

TABLE XIV

SECONDARY DROPOUT RATES

School	1975-76	1976-77	1977-78
Rifle Senior High	11.4	5.7	18.0
Meeker Senior High	5.6	6.3	0
State High School Totals	7.8	9.3	9.8

Source: Colorado Department of Education

3. Secondary Drop-Out Rate

Secondary school drop-out rates are computed each year as a percent of October school enrollments for grades 10-12. The dropout rate increased during the 1977-78 school year in Rifle. The Meeker dropout rate decreased to zero (see Table XIV.)

D. Hospitals and Health Care

The Clagett Memorial Hospital in Rifle is still experiencing operating deficits due to its low level of occupancy. The administration is encouraged though, by a higher daily census recently. A hospital planning committee has been meeting on a monthly basis since last fall. One of their top priorities has been the recruitment of an additional physician to town, but that has not been achieved to date and the community continues to be served by four physicians.

The following is a breakdown of pertinent statistics for the hospitals in Meeker and Rifle. Statistics which reflect the full year 1978 are listed first. These are followed, for comparison, by numbers which reflect the first half of 1978 and which were published in the first monitoring report.

TABLE XV

HOSPITAL STATISTICS IN RIFLE AND MEEKER

	Clagett Memorial Hospital		Pioneer Memorial Hospital	
	1978	First Half 1978	1978	First Half 1978
Total Admissions	909	491	415	210
Total Emergency Room Visits	2356	1232	1354	526
Average Daily Census	8.3	8.1	5.8	6.7
Average Occupancy	26.0	25.3	34.4	39.7
Total Newborn	64	34	44	18

Source: Harald Frieser, Clagett Russ McDaniels, Pioneer

The statistics show that hospital functions have remained relatively stable in most areas throughout the year. In Meeker, there has been a noticeable increase in emergency room visits, but the daily census and average occupancy levels have declined since the first part of the year.

Economic Indicators

Included in this section are statistics which give some indication of economic trends within the communities of Meeker and Rifle (see Table XVI.)

TABLE XVI
ECONOMIC INDICATORS IN RIFLE AND MEEKER

	Meeker	Rifle
Municipal Budget		
1979 (Estimated)	$ 2,572,225	$ 1,107,700
1978 (Actual)	$ 1,550,210	$ 842,890
Municipal Debt		
December 1978	$ 2,240,000	$ 1,416,201
July 1978	$ 1,800,000	$ 614,000
Assessed Valuation		
December 1978	$ 5,225,880	$ 5,699,180
December 1977	$ 4,850,000	$ 4,984,000
Commercial Bank Total Deposits		
December 1978	$15,870,744	$17,056,000
December 1977	$14,512,000	$14,142,000
Commecial Bank Total Loans		
December 1978	$12,071,222	$11,697,000
December 1977	$ 9,746,000	$ 9,201,000
Retail Sales*		
1978 (Estimated)	$ 9,600,000	$19,991,000
1977	$ 8,186,601	$15,419,000

* Estimated based upon actual figures for January - September 1978. Fourth quarter 1978 figures are not yet available.

These figures are evidence of a growing economy in both Meeker and Rifle. Meeker's assessed valuation, a sign of real property growth, has increased by almost 8 percent over the year. Commercial bank deposits, an indicator of a growing money supply, have increased by 9 percent, while bank loans have increased by 24 percent. Retail sales in Meeker, the best indicator of commercial activity, increased 17 percent over the year. The demand upon public services and facilities in Meeker has shown a large increase, as the municipal budget has increased by 66 percent and the municipal debt by 25 percent.

In Rifle, the assessed valuation has increased by 14 percent in the last year. Commercial bank deposits jumped 21 percent and bank loans were up 27 percent. Retail sales in Rifle increased 30 percent over the year. Rifle also shows evidence of the pressure to expand public services in that the municipal budget increased 31 percent and the municipal outstanding debt level rose 130 percent over the year.

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